

What is claimed is:

1. A method for matching a user's musical preferences, comprising:
providing a specific choice of user preferences in song content to a content provider;
mapping the specific choice of user preferences in a song analysis and matching
5 system using a set of fundamental musical properties that captures the user's preferences in
song content;
scanning a database using the song analysis and matching system to find other songs
that have a similar mapping of musical properties; and
playing automatically to the user other songs that have a similar mapping of musical
10 properties.
- 2 A one step song personalization process in accordance with the method of claim 1 in
which the user requests a particular song which the user finds pleasing and the song analysis
and matching system automatically plays a set of songs with similar fundamental musical
15 properties as the chosen song.
3. A limited musical property song personalization process in accordance with the
method of claim 1 in which the user specifies the type of music preferred by defining a partial
element of a song wherein the element is selected from a group of song elements including
20 mood descriptors, tempo descriptors and weight descriptors.
4. A multi-level musical property song personalization process in accordance with the
method of claim 1 in which the user specifies a plurality of analysis elements selected from a
group of analysis elements including a partial element of a song, a song, an album, an artist
25 and a genre.
5. A one step "get more" personalization process in accordance with the method of claim
1 in which the user while listening to a particular song transmits a "get more" command
resulting in the musical properties of the currently playing song being captured by the
30 analysis and matching system and automatically playing to the user other songs that have a
similar mapping of musical properties as the currently playing song.

6. A one step “get faster” personalization process in accordance with the method of claim 1 in which for a given musical property, the user may indicate an affinity for music whose corresponding attribute lies more in a specified direction for the musical property.

7. A one step personalized replay process in accordance with the method of claim 1 in which by accessing a historical record, the user can recover all previous decisions and can restart the playing of music by the analysis and matching system in accordance with previous preferences.

8. A dynamically updated recommendation process in accordance with the method of claim 1 in which the user automatically receives recommendations that match trends detected by the song analysis and matching system.

9. A dynamically updated user profile in accordance with the method of claim 1 in which the song analysis and matching system determines a user profile based on the historical record of past decisions made by the user.

10. A ratings-based dynamically updated recommendation process in accordance with the method of claim 1 in which the song analysis and matching system determines both trends in song selection and dynamic changes in user profile to make recommendations to the user.

11. A method for generating a plurality of high affinity media entities, comprising:
selecting a media entity;

analyzing the selected media entity to extract a set of classification mappings corresponding to the selected media entity;

searching a matching database for other media entities having similar mappings to the selected media entity, wherein the media entities in the matching database have been classified according to a classification system characterized by the convergence of perceptual and digital signal processing classification techniques; and

generating a high affinity playlist that includes a plurality of the other media entities.

12. A method according to claim 11, further comprising persisting the set of classification mappings corresponding to the selected media entity.

5 13. A method according to claim 12, wherein said persisting comprises storing at least one of the set of classification mappings and the high affinity playlist.

14. A method according to claim 11, further comprising accessing a site of a network-enabled computing device, the site having means to render media entities to a user.

10 15. A method according to claim 11, wherein the selected media entity and the other media entities are songs.

15 16. A method according to claim 11, wherein the media entity that is selected is a media entity that is already familiar to a user that selects the media entity.

17. A method according to claim 11, wherein said selecting includes selecting a link corresponding to said selected media entity.

20 18. A method according to claim 11, wherein said analyzing, searching and generating occur automatically in response to said selecting.

19. A method according to claim 11, further comprising:

selecting a second media entity from the playlist;

25 analyzing the selected second media entity to extract a set of classification mappings corresponding to the selected second media entity;

searching the matching database for other media entities having similar mappings to the selected second media entity; and

30 generating a second high affinity playlist that includes a plurality of the other media entities that have similar mappings to the selected second media entity.

20. A method according to claim 19, wherein said selecting of the second media entity includes selecting one of a button and a link while the second media entity is rendered.

21. A method according to claim 19, further comprising persisting the set of classification mappings corresponding to the selected second media entity.

22. A method according to claim 21, wherein said persisting of the set of classification mappings corresponding to the selected second media entity comprises storing at least one of the set of classification mappings corresponding to the selected second media entity and the second high affinity playlist.

23. A method according to claim 19, wherein said second media entity corresponds to a higher affinity to the user than the average affinity of the plurality of media entities in the playlist.

24. A method according to claim 11, wherein said analyzing, searching and generating in connection with the selected second media entity occur automatically in response to said selecting of the second media entity.

25. A computer readable medium bearing computer executable instructions for carrying out the method of claim 11.

26. A modulated data signal carrying computer executable instructions for carrying out the method of claim 11.

27. A computing device comprising means for carrying out each of the steps of the method of claim 11.

28. A method for generating a plurality of high affinity media entities, comprising:
selecting as a base setting at least one media quality, independent of creator or medium name, that represents a high affinity media space for a user;

analyzing the selected at least one media quality to extract a set of classification mappings corresponding to the selected at least one media quality;

searching a matching database for other media entities having similar mappings to the selected at least one media quality, wherein the media entities in the matching database have
5 been classified according to a classification system characterized by the convergence of perceptual and digital signal processing classification techniques; and

generating a high affinity playlist that includes a plurality of the other media entities.

29. A method according to claim 28, further comprising persisting the set of classification mappings corresponding to the selected at least one media quality.
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30. A method according to claim 29, wherein said persisting comprises storing at least one of the set of classification mappings and the high affinity playlist.

31. A method according to claim 28, further comprising accessing a site of a network-enabled computing device, the site having means to render media entities to a user.
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32. A method according to claim 28, wherein the selected media entities are songs and the at least one media quality describes a song.
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33. A method according to claim 28, wherein said analyzing, searching and generating occur automatically in response to said base setting being fully specified by said selecting.

34. A computer readable medium bearing computer executable instructions for carrying out the method of claim 28.
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35. A modulated data signal carrying computer executable instructions for carrying out the method of claim 28.

36. A computing device comprising means for carrying out each of the steps of the method of claim 28.
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37. A method for generating a plurality of high affinity media entities, comprising:
selecting at least one media quality that represents a high affinity media space for a user;
5 associating the at least one media quality with a new media channel;
inputting for each of the at least one media qualities an indication of user inclination toward the media quality;
inputting a link associated with said media channel;
analyzing the selected at least one media quality to extract a set of classification
10 mappings corresponding to the selected at least one media quality of said channel;
searching a matching database for other media entities having similar mappings to the extracted set of classification mappings, wherein the media entities in the matching database have been classified according to a classification system characterized by the convergence of perceptual and digital signal processing classification techniques; and
15 generating a high affinity playlist that includes a plurality of the other media entities.
38. The method of claim 37, wherein said indication of user inclination toward the media quality is a measurement of at least one of the frequency with which the media quality is to appear in the generated playlist and a weight accorded to the media quality relative to other
20 weights assigned to other selected media qualities.
39. A method according to claim 37, further comprising persisting the set of classification mappings corresponding to the channel.
- 25 40. A method according to claim 39, wherein said persisting comprises storing at least one of the set of classification mappings for the channel and the high affinity playlist.
41. A method according to claim 37, further comprising accessing a site of a network-enabled computing device, the site having means to render media entities to a user.

42. A method according to claim 37, wherein the selected media entities are songs and the at least one media quality describes a song.

43. A method according to claim 37, wherein said analyzing, searching and generating occur automatically in response to said inputting of the link associated with said media channel.

44. A computer readable medium bearing computer executable instructions for carrying out the method of claim 37.

45. A modulated data signal carrying computer executable instructions for carrying out the method of claim 37.

46. A computing device comprising means for carrying out each of the steps of the method of claim 37.

47. A method for generating a plurality of high affinity media entities, comprising:
tracking a user's decisions in connection with one of the rendering of media entities and the selection of media stations;

storing a historical record of the user's decisions;
selecting one of a media entity and a media station stored in said historical record;
analyzing the selected one of a media entity and a media station stored in said historical record to extract a set of classification mappings;
searching a matching database for other media entities having similar mappings to the extracted set of classification mappings, wherein the media entities in the matching database have been classified according to a classification system characterized by the convergence of perceptual and digital signal processing classification techniques; and
generating a high affinity playlist that includes a plurality of the other media entities.

48. A method according to claim 47, wherein said other media entities returned in said playlist are substantially different from any previously generated playlist as reflected by said historical record.

- 5 49. A method according to claim 47, wherein said selecting includes inputting a link to said one of a media entity and a media station.

49. A method according to claim 47, further comprising persisting the set of classification mappings corresponding to the one of a media entity and a media station.

10 50. A method according to claim 49, wherein said persisting comprises storing at least one of the set of classification mappings for the one of a media entity and a media station and the high affinity playlist.

15 51. A method according to claim 47, further comprising accessing a site of a network-enabled computing device, the site having means to render media entities to a user.

52. A method according to claim 47, wherein said selecting one of a media entity and a media station includes selecting one of a song and a personalized radio station.

20 53. A method according to claim 49, wherein said analyzing, searching and generating occur automatically in response to said inputting of the link to said one of a media entity and a media station.

25 54. A computer readable medium bearing computer executable instructions for carrying out the method of claim 47.

55. A modulated data signal carrying computer executable instructions for carrying out the method of claim 47.

56. A computing device comprising means for carrying out each of the steps of the method of claim 47.

57. A method for generating a plurality of high affinity media entities, comprising:
5 selecting a first media station;
storing said selection of the first media station in a historical record;
analyzing the selected first media station stored in said historical record to extract a first set of classification mappings;

10 selecting a second media station;
analyzing the selected second media station to extract a second set of classification mappings;

cross-analyzing said first and second sets of classification mappings to generate a prominent set of classification mappings that represent high affinity space for a user performing said selecting of said first and second media stations;

15 searching a matching database for other media entities having similar mappings to the prominent set of classification mappings, wherein the media entities in the matching database have been classified according to a classification system characterized by the convergence of perceptual and digital signal processing classification techniques; and

generating a high affinity playlist that includes a plurality of the other media entities.

20 58. The method of claim 57, further comprising:

before said generating of said playlist, selecting one of all of said other media entities, media entities of said other media entities that are not in a currently rendered playlist and media entities of said other media entities that have never been rendered as reflected by said
25 historical record.

59. The method of claim 57, further comprising:

selecting a third media station;

analyzing the selected third media station to extract a third set of classification

30 mappings; and

cross-analyzing said third media against said first and second sets of classification

mappings to update said prominent set of classification mappings that represent high affinity space for a user performing said selecting of said third media station.

60. The method of claim 57, wherein said cross-analyzing includes calculating the mean and standard deviation for each numerical fundamental of the classification system.

61. A method according to claim 59, wherein said selecting of said first media station includes inputting a link to said one of first media station, said selecting of said second media station includes inputting a link to said one of second media station and said selecting of said third media station includes inputting a link to said one of third media station.

62. A method according to claim 57, further comprising persisting the prominent set of classification mappings.

63. A method according to claim 62, wherein said persisting comprises storing at least one of the prominent set of classification mappings and the high affinity playlist.

64. A method according to claim 57, further comprising accessing a site of a network-enabled computing device, the site having means to render media entities to a user.

65. A method according to claim 59, wherein said selecting of said first media station includes selecting a first radio station, said selecting of said second media station includes selecting a second radio station and said selecting of said third media station includes selecting a third radio station.

66. A method according to claim 57, wherein said analyzing of the selected second media station, said cross-analyzing of said first and second sets of classification mappings, said searching of said matching database and said generating of said playlist occur automatically in response to said selecting of said second media station.

67. A computer readable medium bearing computer executable instructions for carrying out the method of claim 57.

68. A modulated data signal carrying computer executable instructions for carrying out the method of claim 57.

69. A computing device comprising means for carrying out each of the steps of the method of claim 57.

70. A method for generating a plurality of high affinity media entities, comprising:
selecting and rating a media entity in a system for rendering high affinity media entities that tracks a user's historical record;
analyzing the selected media entity to extract a first set of classification mappings;
comparing the first set of classification mappings to the classification mappings in the historical record; and
generating an updated preference profile set of classification mappings in accordance with said comparing.

71. A method according to claim 70, wherein said comparing includes:
if the rating is a positive rating, comparing the first set of classification mappings to existing high affinity mappings in the historical record.

72. A method according to claim 71, wherein said comparing includes:
if the rating is a negative rating, comparing the first set of classification mappings to existing low affinity mappings in the historical record.

73. A method according to claim 70, wherein said comparing includes cross-analyzing said first set of classification mappings and said classification mappings of the historical record.

74. A method according to claim 70, further comprising:

searching a matching database for other media entities having similar mappings to the preference profile set of classification mappings, wherein the media entities in the matching database have been classified according to a classification system characterized by the convergence of perceptual and digital signal processing classification techniques; and generating a high affinity playlist that includes a plurality of the other media entities.

75. A method according to claim 74, further comprising:

instantiating a media station in accordance with said preference profile set of classification mappings; and in response to said instantiating, searching the matching database.

76. A method according to claim 74, wherein said generating of the high affinity playlist includes dynamically weighting each of the other media entities based upon a comparison to at least one of existing high affinity mappings and existing low affinity mappings.

77. A method according to claim 76, wherein said weighting weights a media entity to be more likely to enter the playlist if the media entity accords more with the existing high affinity mappings and weights the media entity to be less likely to enter the playlist if the media entity accords more with the low affinity mappings.

78. A method according to claim 74, wherein said generating of the high affinity playlist includes selecting by the user one of all of the other media entities, those media entities of the other media entities not in a currently rendered playlist and those media entities of the other media entities that have never been rendered as reflected by said historical record.

79. A method according to claim 70, wherein said selecting of the media entity includes inputting a link to the media entity.

80. A method according to claim 74, further comprising persisting the preference profile set of classification mappings.

81. A method according to claim 80, wherein said persisting comprises storing at least one of the preference profile set of classification mappings and the generated high affinity playlist.

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82. A method according to claim 70, further comprising accessing a site of a network-enabled computing device, the site having means to render media entities to a user.

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83. A method according to claim 74, wherein said selecting and rating of the media entity includes selecting and rating a song.

84. A computer readable medium bearing computer executable instructions for carrying out the method of claim 70.

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85. A modulated data signal carrying computer executable instructions for carrying out the method of claim 70.

86. A computing device comprising means for carrying out each of the steps of the method of claim 70.

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